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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,208	09/22/2003	Takashi Suzuki	107156-00203	5740
7590	03/08/2006		EXAMINER	
AREN'T FOX KINTNER PLOTKIN & KAHN, PLLC Suite 600 1050 Connecticut Avenue, N.W. Washington, DC 20036-5339			NI, SUHAN	
			ART UNIT	PAPER NUMBER
			2646	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/665,208	SUZUKI, TAKASHI	
Examiner	Art Unit		
Suhan Ni	2646		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 09 June 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-4 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-4 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/22/03, 5/26/04

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

**DETAILED ACTION**

1. The Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to **Group Art Unit 2646**.
2. This communication is responsive to the preliminary amendment filed 06/09/2004.

***Claim Objections***

3. Claim 4 is objected to because of the following informalities:

Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 claims a voice coil bobbin, and claim 4 claims a loudspeaker, which clearly fails to further limiting claim 1.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Gore (U.S. Pat. - 3,939,942).

Regarding claim 1, Gore discloses a voice coil bobbin (Fig. 1), comprising: a cloth material woven (34) from longitudinal and lateral fibers (30, 32), wherein the longitudinal and lateral fibers are obliquely oriented with respect to a direction of the driving force (Fig. 3) as claimed.

Regarding claim 2, Gore further discloses the bobbin, wherein an oblique orientation angle of the longitudinal or lateral fibers to the direction of the driving force is 45 degrees (Fig. 3).

Regarding claim 3, Gore further discloses the bobbin, wherein the longitudinal or lateral fibers are glass fibers (30, 32).

5. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Katsumi (JP – 57/014280).

Regarding claim 1, Katsumi discloses a voice coil bobbin (1), comprising: a cloth material woven from longitudinal and lateral fibers (11), wherein the longitudinal and lateral fibers are obliquely oriented with respect to a direction of the driving force (Fig.) as claimed.

Regarding claim 2, Katsumi further discloses the bobbin, wherein an oblique orientation angle of the longitudinal or lateral fibers to the direction of the driving force is 45 degrees (abstract).

6. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Jinichi (JP – 03/126400).

Regarding claim 1, Jinichi discloses a voice coil bobbin (105), comprising: a cloth material woven from longitudinal and lateral fibers (105b,c), wherein the longitudinal and lateral fibers are obliquely oriented with respect to a direction of the driving force (Fig.) as claimed.

Regarding claim 2, Jinichi further discloses the bobbin, wherein an oblique orientation angle of the longitudinal or lateral fibers to the direction of the driving force is 45 degrees (abstract).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gore (U.S. Pat. - 3,939,942).

Regarding claim 4, Gore may not clearly teach to utilize the bobbin in a loudspeaker as claimed. Since providing a voice coil having a bobbin for a dynamic loudspeaker is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide the voice coil for a loudspeaker, in order to effectively utilize the voice coil bobbin for manufacturing loudspeakers.

8. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsumi (JP – 57/014280) or Jinichi (JP – 03/126400).

Regarding claim 3, Katsumi or Jinichi may not clearly teach glass fibers as claimed. Since providing fiberglass material for making a voice coil bobbin for a dynamic loudspeaker is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide suitable glass fibers for the voice coil bobbin, in order to effectively manufacture a loudspeakers.

Regarding claim 4, Katsumi or Jinichi may not clearly teach to utilize the bobbin in a loudspeaker as claimed. Since providing a voice coil having a bobbin for a dynamic loudspeaker is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide the voice coil for a loudspeaker, in order to effectively utilize the voice coil bobbin for manufacturing loudspeakers.

***Conclusion***

9. The prior art filed 5/26/2004 made of record and not relied upon is considered pertinent to applicant's disclosure.

10. The prior art filed 9/22/2003 of Foreign Patent Documents have not made of record, since there is no copy of listed foreign patent document provided by the applicant (please see on **PAIR**). Please provide a copy of JP-7-75197 with proper English translation in next communication for consideration.

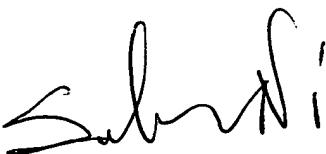
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(571)-272-7505**, and the number for fax machine is **(571)-273-7505**. The examiner can normally be reached on Tuesday and Thursday from 10:00 am to 8:00 pm, and may be reached on Monday, Wednesday and Friday from 10:00 am to 8:00 pm. If it is necessary, the examiner's supervisor, **Sinh N. Tran**, can be reached at **(571)-272-7564**.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

13. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is **(571)-272-2600**, or please see <http://www.uspto.gov/web/info/2600>.

March 4, 2006



SUHAN NI  
PRIMARY EXAMINER